Dr. Kato and Dr. Atsumi reply

To the Editor:

We would respond to the comments by Dr. Mori¹ on our recent study². Mori enrolled 62 patients with rheumatoid arthritis (RA) who had hepatitis B surface (HBs) antigen-negative/anti-hepatitis B core-positive serology, including anti-HBs-negative serology in 30.6% (19/62). They received various disease-modifying antirheumatic drugs such as methotrexate, tacrolimus, infliximab, etanercept, and tocilizumab, but no patient developed hepatitis B virus (HBV) DNA in the sera. He concluded that the risk of reactivation of resolved HBV is low in patients with RA, even in those with anti-HBs-negative serology.

Although reactivation of resolved HBV is a rare complication in rheumatic diseases^{3,4,5,6,7,8,9}, high mortality (100% if fulminant hepatic failure develops) is of great clinical significance in this complication¹⁰, making us watchful for it in all patients with resolved HBV infection. There has been much less evidence regarding reactivation of resolved HBV in the field of rheumatology compared to that in oncology or transplantation. In addition, most studies regarding reactivation of resolved HBV in rheumatology were conducted only in patients with RA or spondyloarthritis^{3,4,5,6,7,8,9}. In contrast to other studies, ours enrolled patients with various autoimmune diseases such as systemic lupus erythematosus, vasculitis syndrome, RA, polymyositis/dermatomyositis, idiopathic thrombocytopenic purpura, adult-onset Still's disease, and autoimmune hemolytic anemia, and many patients needed intensive immunosuppressive therapy such as steroid-pulse therapy in a combination with cyclophosphamide. Consequently, we found that reactivation of resolved HBV can occur during standard immunosuppressive therapy for autoimmune diseases and that anti-HBs titer was significantly lower in the patients in whom reactivation of resolved HBV occurred than in the other patients, at baseline.

Given that the patients in whom reactivation of resolved HBV developed had low anti-HBs titer at baseline, one would wonder if HBV vaccination or hepatitis B immunoglobulin would be used for the prevention of virus reactivation. Considering the low prevalence of resolved HBV reactivation in autoimmune diseases, primary prophylaxis would not be recommended. We believe, at present, that close monitoring of serum viral DNA, aspartate aminotransferase, and alanine aminotransferase could be the best management strategy, especially in patients with low anti-HBs titer who undergo aggressive immunosuppressive therapy, in treatment of autoimmune diseases.

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